

SOLAR ASTRONOMY DATA BASE: Packaged Information on Diskette

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In its role as a library, the National Geophysical Data Center has transferred to diskette a collection of small, digital files of routinely measured solar indices for use on an IBM-compatible desktop computer. Recording these observations on diskette, allows us to distribute specialized information to researchers with a wide range of expertise in computer science and solar astronomy.

We made every data set self-contained by including formats, extraction utilities, and plain-language descriptive text. Moreover, for several archives, two versions of the observations are provided—one suitable for display, the other for analysis with popular software packages. Since the files contain no control characters, each one can be modified with any text editor.

Table 1. Selected solar and geophysical data on diskette. Nearly all tabulated values published monthly in *Solar-Geophysical Data* are available on sets of IBM-compatible diskettes. We partitioned each archive into a family of files that contain short, chronologically sorted records for either 1 month or a year. Except in two cases, these files are not images of tables published earlier.

Data Set Description	Observation Period		Gaps*	(MB)	Disks
IMF Sector Boundaries	01 1947	12 1989		0.3	1
Mean Solar Magnetic Field	03 1968	12 1989		0.3	1
Geomagnetic Indices (Kp, Ap, Cp, C9)	01 1932	09 1989		1.5	1
Neutron Monitors Climax/Huancayo	01 1953	10 1989		39.2	8
Flare Patrol Intervals	01 1955	10 1989	65, 66, <u>67</u>	20.5	5
Flare Reports (not grouped)	04 1938	10 1989		33.8	10
Coronal Index of Solar Activity	01 1964	12 1986		0.2	1
Total Solar Irradiance	11 1978	07 1989		0.3	1
Solar Lyman-Alpha Flux	01 1982	03 1989		0.1	1
Solar Radio Flux Ottawa (10.7 cm)	02 1947	01 1990		0.5	1
Solar Radio Bursts-Fixed Frequency	01 1960	10 1989	<u>60</u>	31.8	9
Sunspot Count Zurich/International	01 1749	10 1989		0.7	1
Sunspot Groups Greenwich	05 1874	11 1981		13.7	5
Sunspot Groups USAF/Mt. Wilson	01 1962	07 1989		5.9	2
Calcium Plage Regions	01 1962	12 1986		6.3	2
Regions of Solar Activity	01 1969	08 1982		5.7	2

*Notation under "Gaps" heading: **bold**=preliminary; underline=partial; plain=missing.

Diskette versions of familiar solar data sets cannot banish all the computer demons of the past. But for small archives they do offer more than a 100-fold increase in convenience over magnetic tapes. To obtain more information about our products, contact the National Geophysical Data Center, Mail Code E/GC2, 325 Broadway, Boulder, Colorado 80303 USA. Phone (303) 497-6346, FAX (303) 497-6513, SPAN 9555::HCOFFEY.